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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/757,287

01/14/2004

Stephen Oser

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12/03/2008

GREENBERG TRAURIG (PHX)
INTELLECTUAL PROPERTY DEPARTMENT
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SANTA MONICA, CA 90404

EXAMINER

CASTELLANO, STEPHEN J

ART UNIT

PAPER NUMBER

3781

MAIL DATE

DELIVERY MODE

12/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/757,287	Applicant(s) OSER ET AL.	
	Examiner /Stephen J. Castellano/	Art Unit 3781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 9-11, 13, 15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-11, 13, 15-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Claims 6-8, 12 and 14 have been canceled. Claims 1-5, 9-11, 13 and 15-16 are pending.

Note that parts 105A and 105C are not actually identical but are similar and resemble mirror image parts. The specification sets forth that each of the three interlocking elements may be characterized by an identical shape. The shape of each element is identical to the others when this limitation is read in light of the specification.

The specification states that “the retainer ring 100 is made of at least two arced elements that are movable relative to each other ...” There is no identification of which two parts or elements (105A, 105B or 105C) are movable with respect to each other.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 5, 9-11, 13 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darby (5720411) in view of Munoz (4757751) and Mauser (1673011).

Darby discloses an end closure assembly for a pressure vessel, comprising a head member (domed shaped element 39, tubular connector 55 and seal 57 made of elastomeric non-metallic material), a retainer ring (79 which can be made of fiber composite) and a securing plate (face plate 41).

Darby discloses the invention except for the threaded portion located a distance from the distal end of the tubular element. Munoz teaches the threaded portion (larger external treads) located a distance from the distal end of the tubular member. It would have been obvious to

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modify the arrangement of Darby by adding a length to the distal end of the tube so that the tube projects outwardly to allow connection to a fitting that is spaced from the securing plate and head member.

The retainer ring could also be a segmented ring as stated in col. 8, line 65 of Darby. The segmented ring would certainly have arced elements movable/rotatable relative to each other. If it should be deemed that Darby lacks sufficient showing of a retainer ring having separate arced elements, then: It would have been obvious to add the teachings of Mauser's retainer ring (locking ring comprising of individual and separate arced sections 17, 18, 19) with arced elements, each arced element having at least one end linked to an end of another element and the arced elements being movable relative to each other to facilitate insertion of the retainer ring into a pressure vessel.

Re claim 15, the retainer ring is annular in shape with a radially outwardly facing surface forming an outer portion and a radially inwardly facing surface forming an inner portion, the outer and inner portions are concentric and the outer portion has a greater diameter than the inner portion. The outer portion engaging the pressure vessel.

Re claim 16, Darby discloses the non-metal universal head member with domed shaped element and tubular element, the domed element defining a convex surface and the concave surface, the tubular element including an inner section and an outer section. Darby discloses the securing plate member (41, 51, 61) including a tubular boss (61) having internal threads complementary to the tubular element and connecting to external threads on the tubular element.

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Darby discloses the invention except for all of the parts of the head member being non-metal. The Official notice taken in the Office action mailed July 19, 2006 that domed heads and tubular connectors of non-metal composite plastic material are well known has not been challenged. Therefore, the previous prior art admission is now being treated as admitted prior art. It would have been obvious to use non-metal, plastic components where corrosion and weight are of concern.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darby in view of Munoz and Mauser and further in view of Galasso et al. (Galasso).

Darby discloses the invention except for the elliptical head member. Galasso teaches an elliptical (insofar as elliptical is shown in the perspective view of Fig. 1) head member (160) in contact with an universal head member (140) and a securing plate (110). It would have been obvious to add an elliptical head member to take up the space between an universal head member and a securing plate to provide a tight fit and to properly support the parts within the assembly so that these parts do not deform in the presence of excessive force or pressure.

Applicant's arguments with respect to claims 1-5, 9-11, 13, 15-16 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Castellano whose telephone number is 571-272-4535. The examiner can normally be reached on increased flexibility plan (IFP).

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen J. Castellano/
Primary Examiner
Art Unit 3727

sjc